

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
Patent and Trademark Office



Attorney Docket No.

Client Ref.

056291-5137

Z70457-1P US

Applicant: Davis et al.

Appln. No.: 09/869,925

Filing Date: July 9, 2001

Date: October 15, 2004

Page 1 of 4

Examiner: Lukton, David

Group Art Unit: 1653

**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
	BR					
	CR					

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	N
DL	DR	39-19634	09/1964	Japan	Nakamura			X	
DL	ER	39-19635	09/1964	Japan	Nakamura			X	
	FR								

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

DL	GR	Abu Zarga et al., "New Natural Dibenzocycloheptylamine Alkaloids": A Possible Catabolic Route for the Colchicine Alkaloids", J. Nat. Prod., (1991), 54(4), 936-940						
DL	HR	Al-Tel et al., "New Natural Colchicinoids: Indications of Two Possible Catabolic Routes for the Colchicine Alkaloids", J. Nat. Prod., (1990) 53 (3), 623-629						
DL	IR	Banwell et al., "Total Syntheses of the Structures Assigned to Salimine and Jerusalemine, Alkaloids from <i>Colchicum decaisnei</i> Boiss. (Liliaceae)", J. Chem. Soc., Chem. Commun., (1994) (22) 2647-2649						
DL	JR	Banwell, et al., "Synthesis and Tubulin-Binding Properties of Some AC- and ABC-Ring Analogues of Allocolchicine", Aust J Chem., (1992), 45, 1967-1982						
DL	KR	Battersby et al., "Biosynthesis. Part 26 <sup>1</sup> . Synthetic Studies on Structural Modification of Late Biosynthetic Precursors for Colchicine", J. Chem. Soc., Perkin Trans 1, (1983), (12), 3053-3063						
DL	LR	Boger et al., "Thermal Reactions of Cyclopropanone Ketals. Application of . . . Total Synthesis of Colchicine", J. Am. Chem. Soc., (1986) (108 (21), 6713-6719						
DL	MR	Boyé et al. "185. Deaminocolchinyll Methyl Ether: Synthesis from . . . Errfects of Deaminocolchinyll Methyl Ether and Dehydro Analogs", Helv. Chem. Acta, (1989), 72 (8), 1690-1696						
DL	NR	Brecht et al., "(-)-(M,7S)-Colchicine and (-)-(M,7S)-10-Ethylthiocolchicide/Alkyne . . . Consecutive [4+2] and [3+2] Cycloadditions", Eur. Jour. Org. Chem., (1998) (11) 2451-2460						
DL	OR	Brossi et al., "aS, 7S-absolute configuration of natural (-)-colchicine and allocongeners", FEBS Lett., (1990), 262 (1), 5-7						
DL	PR	Orsini at al (1997) Carbohydrate Research 301, 95-109						
DL	QR	Brown e1 al (1995) J. Chem. Soc. Perkin. Trans. 1 577-581						

Examiner

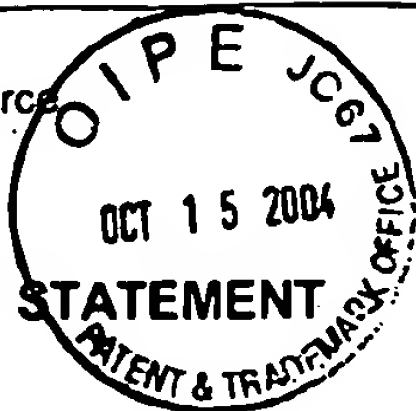
Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

David Lukton

11-23-04

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
Patent and Trademark Office



**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

Attorney Docket No.

Client Ref.

056291-5137

Z70457-1P US

Applicant: Davis et al.

Appln. No.: 09/869,925

Filing Date: July 9, 2001

Date: October 15, 2004

Page 2 of 4

Examiner: Lukton, David

Group Art Unit: 1653

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
	BR					
	CR					

**FOREIGN PATENT DOCUMENTS**

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclose	No
	DR							
	ER							
	FR							

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

DL	GR	Deinum et al., "Synthesis and Binding to Tubulin of an Allocolchicine Spin Probe." Acta Chem. Scand, Ser B (1981) B35 (10), 677-681				
DL	HR	Dilger et al., "Arbeitsvorschriften und Meßwerte Procedures and Data Formaldehyd-O-oxid und Colchicine: ein eleganter Zugang zu Allocolcicinen", J. Prakt Chem./Chem-Ztg, (1998), 340 (5), 468-471 (in German)	x			x
X	IR	<del>Dokl Akad. Nauk USSR, (1991) (4) 33-35</del>		x		x
DL	JR	Dumortier et al., "Alternations of Rings B and C of Colchicine Are Cumulative in Overall Binding to Tubulin but Modify Each Kinetic Step", Biochemistry, (1996), 35 (49), 15900-15906				
X	KR	Fernholz, "Über die Umlagerung des Colchieins mit Natriumalkoholat und die Struktur des Ringes C'", Justus Liebigs Ann. Chem., CODEN: JLACBF, 568, (1950), 63-82				
DL	LR	Fitzgerald, "Molecular Features of Colchicine Associated with Antimitotic Activity and Inhibition of Tubulin Polymerization", Biochemistry Pharmacology, (1976), 25, 1383-1387				
DL	MR	Ghera et al., "Total Synthesis of Lignan (±)-Schizandrin", J. Chem. Soc., Chem. Commun., (1978) (11), 480-481				
DL	NR	Hahn et al., "Synthesis and Evaluation of 2-Diazo-3,3,3-Trifluoropropanoyl . . . Photochemistry, and Tubulin Binding", Photochem. Photobiol., (1992) 55 (1), 17-27				
DL	OR	Han et al., "Distances between the Paclitaxel, Colchicine, and Exchangeable GTP Binding Sites on Tubulin", Biochemistry, (1998), 37 (19), 6636-6644				

Examiner

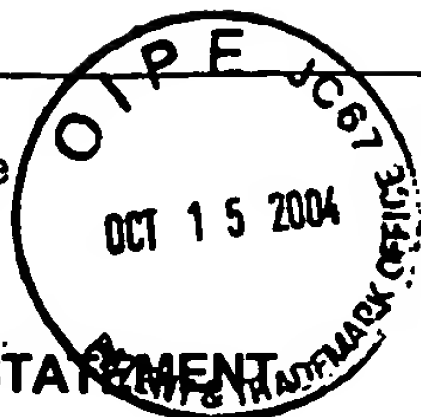
Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

David Lukton

1-4-05

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
Patent and Trademark Office



Attorney Docket No.

Client Ref.

056291-5137

Z70457-1P US

Applicant: Davis et al.

Appln. No.: 09/869,925

Filing Date: July 9, 2001

Examiner: Lukton, David

Group Art Unit: 1653

Date: October 15, 2004

Page 4 of 4

### U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
	BR					
	CR					

### FOREIGN PATENT DOCUMENTS

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract	Translation Readily Available
					Enclosed No	Enclose No
	DR					
	ER					
	FR					

### OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

DL	GR	Leiter et al., "Damage Induced in Sarcoma 37 with Chemical Agents. III. Colchicine Derivatives Related to Trimethylcolchicinic Acid and to Colchinol", J. Natl. Cancer Inst., (1952), 13, 379-392				
DL	HR	Medrano, "Roles of Colchicine Rings B and C in the Binding Process to Tubulin", Biochemistry, (1989), 28 (13), 5589-5599				
DL	IR	Menéndez et al., "A Thermodynamic Study of the Interaction of Tubulin with Colchicine Site Ligands", J. Biol. Chem., (1989), 264, (28), 16367-16371				
DL	JR	Olszewski et al., "Potential Photoaffinity Labels for Tubulin. Synthesis and . . . Colchicine, Combretastatin, and 3,4,5-Trimethoxybiphenyl", J. Org. Chem., (1994), 59 (15) 4285-4296				
DL	KR	Powell et al., "Role of Ring C Substituents Related to Allocolchicine on Antitubulin Action", Med. Chem. Res., (1996), 164-173				
X	LR	Zh Obshch Khim., (1994) 64(5) 856-864 (in Russian)				
X	MR	Timbekov et al., "Mass Spectrometric Study of Alkaloids of the Homoaporphine, Homomorphine and Allocolchicine Series", "Tezisy Dokl. = Sov.-Indiiskii Simp. Khim. Priir. Soedin., 5th (1978), p. 85 (Chemical Abstracts attached)				
DL	NR	Mackay et al., "Structures of Colchicine Analogues. I. Allocolchicine", Acta Cryst, (1989), C45, 795-799				
	OR					
	PR					

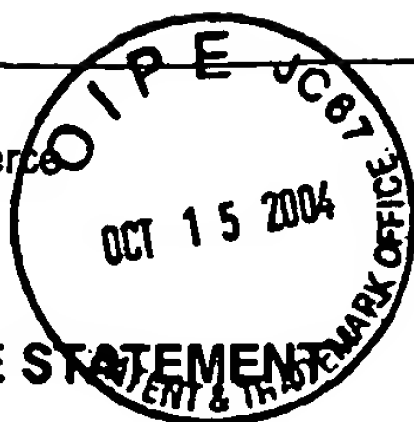
Examiner

Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

David Lukton 1-4-05

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
Patent and Trademark Office



Attorney Docket No.

Client Ref.

056291-5137

Z70457-1P US

Applicant: Davis et al.

Appln. No.: 09/869,925

Filing Date: July 9, 2001

Date: October 15, 2004

Page 3 of 4

Examiner: Lukton, David

Group Art Unit: 1653

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

## U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
	BR					
	CR					

## FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name		Abstract		Readily Available	
							Enclosed	No	Enclose	N
	DR									
	ER									
	FR									

## OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

DL	GR	Hastie, "Spectroscopic analyses of colchicinoid-tubulin complexes", Cellular Pharmacology, (1993), 1 (Suppl. 1), S17-S21				
DL	HR	Hastie, "Spectroscopic and Kinetic Features of Allocolchicine Binding to Tubulin", Biochemistry, (1989), 28 (19), 7753-7760				
DL	IR	Hrbek et al., "Circular Dichroism of Alkaloids of Colchicine Type And Their Derivatives", Collect. Czech. Chem. Commun., (1982), 47 (8), 2258-2279				
DL	JR	Iorio, "Contraction of the Tropolonic Ring of Colchicine by Hydrogen Peroxide Oxidation", Heterocycles, (1984), 22 (10), 2207-2211				
X	KR	<del>Izv Akad Nauk Turkm SSR, Ser Fiz-Tekh, Khim-Geol Nauk, (1976), (1), 70-73</del>			x	x
DL	LR	Kiselev et al., "Benzenoid Rearrangement of Colchicine by the Action of Ethylene Glycol", Zh. Org. Khim., (1977), 13 (11), 2337-2342 (in Russian) (English translation attached)				
DL	MR	Kiselev et al., "Derivatives of Aminocolchicide - VI. DICOLCHICIDYL-L-LYSINE" Obshch. Khim., (1970), 40 (4), 914-915 (in Russian, English translation attached)				
DL	NR	Kiselev, "Derivatives of Aminocolchicide. VII", Zh. Zh. Obshch. Khim., (1971), 41 (2) 464-466 (in Russian, English translation attached)				
DL	OR	Kita et al., "Non-phenolic oxidative coupling of phenol ether derivatives using phenyliodine (III) bis(trifluoroacetate)", Chem. Commun. (Cambridge), (1996) (12), 1481-1482				

Examiner

Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

DL Lukton

1-4-05